

DERWENT-ACC-NO: 2001-057580

DERWENT-WEEK: 200329

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TITLE: Hybrid switching mode flat panel
display device has transparent metal oxide layer through
which capacitor line and data bus line are connected

INVENTOR: HAN, C W; LEE, J G ; LEE, J K

PATENT-ASSIGNEE: LG PHILIPS LCD CO LTD[GLDS]

PRIORITY-DATA: 1998KR-0027249 (July 7, 1998)

PATENT-FAMILY:

PUB-NO	PAGES	PUB-DATE	MAIN-IPC
KR 2000007760 A		February 7, 2000	N/A
000	G02F 001/136		
US 6509939 B1		January 21, 2003	N/A
014	G02F 001/1368		

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
KR2000007760A	N/A	
1998KR-0027249	July 7, 1998	
US 6509939B1	N/A	
1999US-0348704	July 7, 1999	

INT-CL (IPC): G02F001/136, G02F001/1368

ABSTRACTED-PUB-NO: KR2000007760A

BASIC-ABSTRACT:

NOVELTY - A common electrode and data electrode are formed
on a gate insulator

(119) in a substrate. Several storage capacitor lines (105) are arranged on common electrode. A thin film transistor (TFT) is formed at the cross of a gate and data bus line (101,102) arranged on the substrate. The capacitor line and data line are connected through a transparent metal oxide layer deposited on the holes of gate insulator.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for liquid crystal display device.

USE - Hybrid switching mode liquid crystal display device such as flat panel display device.

ADVANTAGE - The device has high aperture ratio.

DESCRIPTION OF DRAWING(S) - The figures show a plan view and sectional view of formation of storage capacitor line.

gate bus line 101

data bus line 102

storage capacitor lines 105

gate insulator 119 5A, 5B/7

ABSTRACTED-PUB-NO: US 6509939B

EQUIVALENT-ABSTRACTS:

NOVELTY - A common electrode and data electrode are formed on a gate insulator (119) in a substrate. Several storage capacitor lines (105) are arranged on common electrode. A thin film transistor (TFT) is formed at the cross of a gate and data bus line (101,102) arranged on the substrate. The capacitor line and data line are connected through a transparent metal oxide layer deposited on the holes of gate insulator.

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gate bus line 101

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storage capacitor lines 105

gate insulator 119 5A, 5B/7

TITLE-TERMS: HYBRID SWITCH MODE FLAT PANEL DISPLAY DEVICE
TRANSPARENT METAL
OXIDE LAYER THROUGH CAPACITOR LINE DATA BUS
LINE CONNECT

DERWENT-CLASS: P81 U14

EPI-CODES: U14-H01A; U14-K01A2B; U14-K01A3;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N2003-221808

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